

REMARKS/ARGUMENTS

This Amendment and Response to Office Action is submitted in response to the non-final Office Action mailed August 25, 2005. At that time, claims 1-4, 17-23, 42-44, and 48-50 were pending in the application. Claims 5-16, 24-41, 45-47, and 51-71 were withdrawn in response to a species election requirement.

In the Office Action, the Examiner objected to claim 1 based on a formality. The Examiner rejected claims 1, 17, and 20 under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,130,298 to Shaunnessey (hereinafter, "Shaunnessey"). Claims 1-4, 17, 18, 20-23, 41-44¹, 48, and 49 were rejected under 35 U.S.C §102(b) as being anticipated by United States Patent No. 6,237,943 to Brown et al. (hereinafter, "Brown"). Additionally, claims 1-4, 17, 18, 20-23, 41-44, 48, and 49 were rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,709,010 to Dominissini et al. (hereinafter, "Dominissini"). Finally, claims 1-4, 17-19, 20-23, 41-44, and 48-50 were rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,709,010 to McGee et al. (hereinafter, "McGee").

Claims 1, 3-4, 17-20, 22-23, 42-44, and 48-50 remain in this application. Claims 2 and 21 have been cancelled. Claim 1 has been amended to include the subject matter of claim 2. Claim 20 has been amended to include the subject matter of claim 21. Claims 72-78 have been added. Support for new claim 72 may be found in original claims 1 and 20. Support for new claims 73-78 may be found in original claims 2-4 and 17-19 respectively.

In view of these amendments and the following remarks, immediate allowance of claims 1, 3-4, 17-20, 22-23, 42-44, 48-50, and 72-78 is respectfully requested.

Objection to Claim 1

The Examiner objected to claim 1 based on an informality. See Office Action, page 2. Applicants have amended claim 1 to correct this informality according to the Examiner's suggestion.

¹ Claim 41 was withdrawn. Applicants assume that the Examiner is merely rejecting claim 42-44.

Rejection of Claims under 35 U.S.C. §102

The Examiner rejected claims 1-4, 17-23, 42-44, and 48-50 under 35 U.S.C. §102. Specifically, claims 1, 17, and 20 stand rejected under Section 102 as being anticipated by Shaunnessey; claims 1, 3-4, 17, 18, 20, 22-23, 41-44, 48, and 49 stand rejected under Section 102(b) as being anticipated by Brown; claims 1, 3-4, 17, 18, 20, 22-23, 41-44, 48, and 49 stand rejected under Section 102(e) as being anticipated by Dominissini; and claims 1, 3-4, 17-19, 20, 22-23, 41-44, and 48-50 stand rejected under Section 102(e) as being anticipated by McGee. See Office Action, pages 2-4.

It is well settled that a claim is anticipated under 35 U.S.C. § 102(b) only if “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP §2131, citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP §2131, citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Each of these rejections will be discussed separately.

Rejection of Claims 1, 17, and 20 under §102(b) as being anticipated by Shaunnessey

By this paper, claims 1 and 20 have been amended to include the subject matter of dependent claims 2 and 21 respectively. The Examiner did not reject the subject matter of claims 2 and 21 as being anticipated by Shaunnessey, because Shaunnessey does not disclose that the cushion guide is coupled to the inflatable cushion “by a first cushion attachment and by a second cushion attachment.” Therefore, Shaunnessey does not disclose this subject matter.

Additionally, claims 1 and 20 recite a “cushion guide comprising a tether.” Shaunnessey does not disclose a cushion guide comprising a tether. Rather, Shaunnessey discloses a large rectangular piece of flexible material.

The Examiner asserts that “Shaunnessey disclose[s] an overhead airbag comprising a cushion guide (42) coupled to the inflatable cushion (35) and to the vehicle.” Office Action, page 3. Applicants assume the Examiner was referring to the flexible material 41 as a cushion

guide rather than the edge 42 of the flexible material 41.² The following portion of Shaunnessey describes the flexible material 41:

As best seen in FIGS. 1 and 6, the cross sectional shape of the bag 35 is that of a teardrop with the wider portion thereof disposed toward the lap and chest areas of the driver and passengers on the front seat of the vehicle. A laterally extending section of generally transparent, flexible material, indicated at 41, is secured to the upper marginal edge, indicated at 42, of the bag and the upper margin, indicated at 43 of the transparent section 41 is secured to the base of an elongated, inverted, generally U-shaped storage compartment 44 mounted in an elevated position in the passenger compartment of the automobile 20 so as to generally overlie the knees of the driver and any passengers on the front seat 32 of the vehicle. Specifically, the storage compartment 44 is preferably mounted in a recess in the underside of the roof 24 of the vehicle 20 so that the compartment 44 and bag 35 are substantially concealed from view when the bag is in a folded, compact, inoperative position. The upper margin 43 of the bag section 41 is secured to the base portion, indicated at 45, of the compartment 44 by a contoured plate member 46, which is held in clamping engagement with the margin 43 of the bag section 41 by a plurality of laterally spaced pairs of screws 47, one pair being shown in FIG. 3.

Shaunnessey, col. 6, line 54 through col. 7, line 9. This section of Shaunnessey does not disclose a “cushion guide comprising a tether,” as recited in claims 1 and 20. Rather, this section discloses “[a] laterally extending section of generally transparent, flexible material.” However, a laterally extending section of generally transparent, flexible material is not a “cushion guide ... comprising a tether.”

Merriam-Webster’s 11th Collegiate Dictionary defines a tether as “something (as a rope or chain) by which an animal is fastened so that it can range only within a set radius.” This definition states that a tether is something like a rope or chain indicating a more elongate structure. As shown in Shaunnessey’s Figure 1, the width of the flexible material 41 extends along substantially the entire width of the passenger compartment. The height of the flexible material 41 is considerably smaller than its width. Shaunnessey’s flexible material 41 is not an elongate tether, but rather is a large rectangular piece of material.

² Shaunnessey describes element 42 as the upper marginal edge of “[a] laterally extending section of generally transparent, flexible material.” Shaunnessey, col. 6, lines 58-59.

Shaunnessey further discloses that an “[o]pen weave netting of nylon cord is an example of one type of material suitable for use in the construction of the transparent section 41 of the bag 35.” Shaunnessey, col. 7, lines 28-31. Open weave netting is not a tether as recited in claims 1 and 20.

Because Shaunnessey does not disclose that the cushion guide is coupled to the inflatable cushion “by a first cushion attachment and by a second cushion attachment” and does not disclose a “cushion guide comprising a tether” Shaunnessey does not disclose each and every element of claims 1 and 20. Because claim 17 depends from claim 1, Shaunnessey does not anticipate claim 17.

Consequently, because Shaunnessey does not disclose each and every element of claims 1, 17, and 20, Shaunnessey does not anticipate these claims. Applicants request withdrawal of this rejection.

Rejection of Claims 1-4, 17, 18, 20-23, 41-44, 48, and 49 under §102(b) as being anticipated by Brown

By this paper, claim 1 recites “An overhead airbag system comprising ... an inflatable cushion for deployment from a vehicle roof;” claim 20 recites “An overhead airbag system for protecting a vehicle occupant, the overhead airbag system comprising ... an inflatable overhead airbag cushion for mounting in a roof of a vehicle and for deployment from the roof;” and claim 42 recites “An overhead airbag system for protecting a vehicle occupant, the overhead airbag system comprising ... an inflatable overhead airbag cushion for deployment from a vehicle roof.”

The Examiner asserts that “Brown et al. discloses an overhead airbag with a tether (44; see Figure 3).” Office Action, page 3. However, Brown does not disclose an overhead airbag. Rather, Brown discloses a side curtain airbag as described in the specification and depicted in the figures. For example, Brown discloses that “[t]he roof rail 32 carries an inflatable restraint curtain 36.” Brown, col. 4, line 10. Brown also discloses that “[t]he stowed restraint curtain 36 and the gas generator 38 are both housed within a compartment located behind the headliner trim panel 41 (see FIGS. 4 and 5), so as to be hidden from view.” *Id.* at lines 26-30. Therefore,

because Brown discloses that the inflatable restraint curtain 36 is carried by the roof rail 32, Brown discloses a side curtain.

Side curtain airbags differ from overhead airbags, because they are mounted to and deployed from the vehicle's roof rail. Overhead airbags are mounted in and deployed from the vehicle's roof. The roof differs from the roof rail, because the roof rail runs along the side of the car, while the roof spans from the windshield to the rear window and from roof rail to roof rail. Additionally, the roof rail is not a part of the roof, rather it supports the roof. This distinction is important because, unlike an overhead airbag, a side curtain airbag only deploys along the side of the car. Because the side curtain airbag can only deploy along the side of the car, it cannot prevent a passenger from being ejected through the windshield of a vehicle. On the other hand, an overhead airbag may be deployed to prevent ejection through the windshield or rear window.

Because Brown discloses a side curtain airbag, rather than an overhead airbag, as recited in claims 1, 20, and 42, Brown does not disclose each and every element of these claims. Because claims 3-4, 17, and 18 depend either directly or indirectly from claim 1; claims 22 and 23 depend either directly or indirectly from claim 20; and claims 43-44 and 48-49 depend either directly or indirectly from claim 42, Brown does not anticipate these claims.

Consequently, because Brown does not disclose each and every element of claims 1, 3-4, 17, 18, 20, 22-23, 41-44, 48, and 49, Brown does not anticipate these claims. Applicants request withdrawal of this rejection.

Rejection of Claims 1-4, 17, 18, 20-23, 41-44, 48, and 49 under §102(e) as being anticipated by Dominissini

As discussed above, claims 1, 20, and 42 are directed to overhead airbag systems.

The Examiner asserts that "Dominissini et al. discloses an overhead airbag with a tether (61)." Office Action, page 4. However, Dominissini does not disclose an overhead airbag. Rather, Dominissini discloses a side curtain airbag as described in the specification and depicted in the figures. For example, Dominissini discloses that the "inflatable cushion 44 may be attached to lateral surface 15 proximate the roof rail 20 via fasteners 46 above window 12 and door 13." Dominissini, col. 4, lines 64-66. Additionally, Dominissini discloses that "[i]n the

stowed configuration, the inflatable cushion 44 may have a thin shape that can be stored compactly above door 13.” Id. at col. 5, lines 6-8. Dominissini also discloses “five fasteners 46 securing the inflatable cushion 44 to the roof rail 20.” Id. at col. 6, lines 6-8. Therefore, because Dominissini discloses that the inflatable cushion 44 is attached to the roof rail, Dominissini discloses a side curtain airbag.

Because Dominissini discloses a side curtain airbag rather than an overhead airbag as recited in claims 1, 20, and 42, Dominissini does not disclose each and every element of these claims, as shown above.

Additionally, by this paper, claim 1 recites a “cushion guide comprising a tether coupled to ... the vehicle by a vehicle attachment positioned between the first and second cushion attachments;” claim 20 recites a “cushion guide comprising a tether ... coupled to the vehicle reference point by a vehicle attachment, wherein the vehicle reference point is located between the first and second cushion attachments;” and claim 42 recites a “cushion deployment guide comprising a tether ... being slidably attached to the vehicle reference point between the first and second cushion attachment points.” Dominissini does not disclose a cushion guide or a cushion deployment guide comprising a tether coupled to a vehicle attachment or a vehicle reference point between the first and second cushion attachments, as recited in claims 1, 20, and 42.

The Examiner also asserts that “Dominissini et al. discloses ... [the] tether (61) [is] attached the airbag at two points and being attached to a vehicle reference point (68) by a vehicle attachment (80). The vehicle attachment is an eyelet loop (see Figure 4).” However, the tether (61) is not attached to the airbag at two points. Rather, the tether is connected to the airbag at one point 60 and the roof rail at point 64. See Dominissini, Figure 4. Additionally, the vehicle attachment may not be positioned between the two points because the tether is only connected to the airbag at one point.

Because Dominissini only discloses one point where the tether attaches to the airbag, Dominissini does not disclose a first and second cushion attachment as recited in claims 1, 20, and 42. Therefore, Dominissini does not disclose each and every element of these claims.

Because claims 3-4 and 17-18 depend either directly or indirectly from claim 1; claims 21-23 depend either directly or indirectly from claim 20; and claims 43-44 and 48-49 depend either directly or indirectly from claim 42, Dominissini does not anticipate these claims.

Consequently, because Dominissini does not disclose each and every element of claims 1, 3-4, 17, 18, 20, 22-23, 41-44, 48, and 49, Dominissini does not anticipate these claims.

Applicants request withdrawal of this rejection.

Rejection of Claims 1-4, 17-19, 20-23, 41-44, and 48-50 under §102(e) as being anticipated by McGee

As mentioned above, claims 1, 20, and 42 are directed to overhead airbag systems.

The Examiner asserts that “McGee et al. discloses an overhead airbag with a tether (15; see Figure 4).” Office Action, page 4. However, McGee does not disclose an overhead airbag. Rather, McGee discloses a side curtain airbag as described in the specification and depicted in the figures. For example, McGee discloses that “housing 10 ... extends from a point 11 on the ‘C’-Post 7, across the top of the rear door 4, across the top of the front door 2, and down the ‘A’-Post 5 to a point 12.” *Id.* at lines 43-46. Because the housing 10 extends across the roof rail and the “A”-Post 5 of the vehicle, the inflatable element 14, which is stored in the housing 10, is deployed from the roof rail and the “A”-Post 5 not from the vehicle roof. Therefore, McGee discloses a side curtain airbag.

Because McGee discloses a side curtain airbag, rather than an overhead airbag, as recited in claims 1, 20, and 42, McGee does not disclose each and every element of these claims, as shown above. Because claims 3-4 and 17-19 depend either directly or indirectly from claim 1; claims 21-23 depend either directly or indirectly from claim 20; and claims 43-44 and 48-50 depend either directly or indirectly from claim 42, McGee does not anticipate these claims.

Consequently, because McGee does not anticipate claims 1, 3-4, 17-19, 20, 22-23, 41-44, and 48-50, Applicants request withdrawal of this rejection.

New Claims 72-78 are Patentably Distinct from the Cited References.

New claim 72 recites “[a]n overhead airbag system for protecting a vehicle occupant, the overhead airbag system comprising ... an inflatable cushion for deployment from a roof of a vehicle.”

The Examiner asserts that Brown, Dominissini, and McGee disclose “an overhead airbag with a tether.” See Office Action, pages 3-4. However, as shown above, Brown, Dominissini, and McGee do not disclose an overhead airbag. Rather, these references disclose a side curtain airbag as described in the specification and depicted in the figures.

Because Brown, Dominissini, and McGee disclose a side curtain airbag, rather than an overhead airbag, as recited in claim 72, claim 72 is patentably distinct from these references.

New claim 72 also recites a “cushion guide comprising a tether coupled to the inflatable cushion.” As shown above, Shaunnessey does not disclose a cushion guide comprising a tether. Rather, Shaunnessey discloses a large rectangular piece of flexible material. Because Shaunnessey does not disclose “cushion guide comprising a tether,” as recited in claim 72, claim 72 is patentably distinct from Shaunnessey.


Consequently, because new claims 73-78 depend from new claim 72, these claims are also patentably distinct from the cited references.

Appl. No. 10/611,699
Amdt. dated December 14, 2005
Reply to Office Action of August 25, 2005

Conclusion

Applicants respectfully requests that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,


Sally J. Brown
Reg. No. 37,788
Attorney for Applicants

Date: 12/14/05

Autoliv ASP, Inc.
3350 Airport Road
Ogden, Utah 84405
Telephone: (801) 625-4994

S:\ALLCLIENTS\2949 Autoliv\2949.2.135\25Aug05 _OfficeAction\2949-2-135 RespOA.doc